

LVII.—On an African Barbel hitherto confounded with *Barbus trimaculatus*, Peters. By G. A. BOULENGER, F.R.S.

FOLLOWING the lead of Günther *, Steindachner †, and Max Weber ‡, I have hitherto referred to *Barbus trimaculatus* a small barbel common in British Central Africa, Rhodesia, Portuguese East Africa, Angola, the Transvaal, and Zululand. Having recently had an opportunity of examining great numbers of these fishes, I have come to the conclusion that they cannot possibly be identified with the species so carefully described and figured by Peters §. As suggested by the latter author, *B. trimaculatus*, established on a single example from the Rovugo River, Mozambique, is very closely related to, if not identical with, *B. trispilus*, Bleeker, of which I have recently given a description ||. The species for which I now propose the name *B. decipiens* differs from *B. trimaculatus* and *B. trispilus* in its strong ossified last simple dorsal ray, shorter barbels, and more numerous scales in the lateral line. It would never have been confounded with *B. trimaculatus* but for its deceptive markings, which, moreover, are by no means constant. I append a description based on the following series of specimens:—

- 2, R. Ruo, Brit. Cent. Africa.—Sir H. H. Johnston.
- 1, between Kondowe and Karonga, Brit. Cent. Africa.—Sir H. H. Johnston.
- 6, near Salisbury, Rhodesia.—Guy A. K. Marshall.
- 13, Mazoë R., Rhodesia.—J. ff. Darling.
- 6, Beira, Portug. E. Africa.—C. Grant.
- 2, Groot Olifant R., Transvaal.—Capt. G. E. Bruce.
- 5, Klein " " " "
- 2, near Komati Poort, " "
- 2, Potchefstroom, Transvaal.—Stenning.
- 28, E. of Pietersburg, Transvaal.—C. Grant.
- 4, Umfulosi, Zululand.—C. Grant.
- 1, Elcheleselwane, Zululand.—Dr. E. Warren.
- 9, Mossamedes, Angola.—Dr. W. J. Ansorge.

Barbus decipiens.

Depth of body 3 to 4 times in total length, length of head $3\frac{2}{3}$ to $4\frac{1}{4}$ times. Snout rounded, as long as or a little longer

* Proc. Zool. Soc. 1893, p. 619.

† Sitzb. Ak. Wien, ciii. i. 1894, p. 452.

‡ Zool. Jahrb., Syst. x. 1897, p. 151.

§ Reise n. Mossamb. iv. p. 55, pl. xi. fig. 4 (1868).

|| Ann. & Mag. Nat. Hist. (7) xviii. 1906, p. 33.

than the eye in the adult; diameter of eye 3 to $4\frac{1}{2}$ times in length of head, interorbital width $2\frac{1}{2}$ to $2\frac{2}{3}$ times; mouth slightly inferior, with feebly developed lips, interrupted on the chin; barbels two on each side, anterior about as long as eye, posterior 1 to $1\frac{1}{2}$ diameters of eye, the distance between them about $\frac{1}{2}$ diameter of eye. Dorsal III 7-8, last simple ray strong, bony, not serrated, nearly straight, or feebly curved, $\frac{2}{3}$ to once length of head; free edge of the fin feebly emarginate; its distance from the occiput less than its distance from the caudal fin. Anal III 5, longest ray about $\frac{3}{5}$ length of head. Pectoral $\frac{2}{3}$ to $\frac{3}{4}$ length of head, not reaching ventral; latter below anterior rays of dorsal. Caudal peduncle $1\frac{2}{3}$ to 2 times as long as deep. Scales 32-36 $\frac{5\frac{1}{2}-6\frac{1}{2}}{5\frac{1}{2}}$, 3-4 between lateral line and ventral, 14-16 round caudal peduncle. Brown above, silvery on the sides and below; three more or less distinct round blackish spots often present on each side, the first and second just above the lateral line, one in front and one behind the vertical of the base of the dorsal, the third at the base of the caudal fin and traversed by the lateral line; these spots may be absent or reduced to the one at the base of the caudal fin; fins whitish, without spots.

This fish grows to a length of 125 mm., but is usually smaller, about 100 mm. long.

LVIII.—Spirochaeta (Trypanosoma) Balbianii (*Certes*), *its Movements, Structure, and Affinities; and on the Occurrence of Spirochaeta anodontæ (Keysselitz) in the British Mussel, Anodonta cygnea*. By H. B. FANTHAM, B.Sc., Derby Research Scholar, University College, London; and St. Mary's Hospital Medical School.

(Preliminary Account.)

Introduction.

THERE are few more interesting organisms at present under investigation than those microscopic yet most active forms known as Spirochaetes, which lie near the border-line of plants and animals. They are, indeed, veritable members of Hæckel's kingdom Protista, and it is still a disputed point whether they are really Protozoa or Bacteria.